

**Disposition of Peer Review Comments for
Toxicological Profile for Dinitrotoluenes**

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Prepared for:

**Agency for Toxic Substances and Disease Registry
U.S. Public Health Service**

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Peer reviewers for the second draft of the Toxicological Profile for Dinitrotoluenes were:

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ATSDR would like to thank these scientists for their review of the document. When the reviewer's suggestions were followed, or when other revisions obviated the need to respond, no further response is provided herein. Revisions that may have obviated the need to respond included sections that were rewritten, moved, or deleted. Some of the editorial and format suggestions could not be followed without changing ATSDR established format. Additionally, several stylistic changes that were purely arbitrary were not incorporated. Other suggestions made by the reviewers that ATSDR decided not to follow are discussed below

Review comments provided by Reviewer #1:

COMMENT: The Reviewer requested that the animal species be listed in Figures 2-2 and 2-3.

RESPONSE: *The purpose of these figures is to illustrate the overall toxicity of dinitrotoluenes. Specific details such as animal species are provided in the accompanying text in Section 2.2.*

All other comments provided by Reviewer #1 were addressed as suggested.

Review comments provided by Reviewer #2:

COMMENT: The Reviewer suggested adding three studies to the discussion of endocrine disruptions in Section 3.6: Beronius et al. 2010; Rajender et al. 2011; Arnich et al. 2011.

RESPONSE: *These studies are not specific to dinitrotoluenes and were not added to the profile.*

COMMENT: The Reviewer suggested adding a paper by Tchounwou et al. (2003) to the reference list.

RESPONSE: *Tchounwou paper is a review article; it is ATSDR's practice to cite primary sources rather than reviews.*

COMMENT: The Reviewer noted that there are insufficient data addressing overall potential for human exposure from hazardous waste sites with respect to exposure pathway, susceptible populations and environmental levels.

RESPONSE: *As noted in Section 6.5, the primary exposure pathways for the general population is dermal contact and incidental ingestion from contaminated groundwater and soil. Populations with potentially high exposure to DNT include individuals living in proximity to sites where DNT is produced or disposed or near hazardous waste sites; this is discussed in Section 6.7. A need for additional studies which provide information on environmental levels is discussed in Section 6.8.1.*

All other comments provided by Reviewer #2 were addressed as suggested.

Review comments provided by Reviewer #3:

COMMENT: The Reviewer identified a number of studies that should be added to the toxicological profile.

RESPONSE: *Most of the suggested studies were added to the profile. The Albert et al. (2001) study was already cited in the profile. Two studies were not added to the profile: Maeda et al. (2007) because the study did not provide a statistical analysis of the mutagenicity tests and Zhang et al. (2006) because the publication provided insufficient information to identify the sample matrix.*

COMMENT: The Reviewer noted that it would be desirable if further information could be provided on import quantity of DNT in the United States.

RESPONSE: *No additional import data were identified.*

COMMENT: Regarding the range of log K_{OW} reported in Section 6.1, the Reviewer noted that the 1998 profile listed log K_{OW} values of 1.98 and 1.72 for 2,4- and 2,6-DNT, respectively.

RESPONSE: *The range of K_{OW} values reported included all of the DNT isomers (2,3-DNT; 2,4-DNT; 2,5-DNT; 2,6-DNT; 3,4-DNT; and 3,5-DNT). Additionally, the value of 2.10 for 1,6-DNT is correct as reported in the current profile.*

All other comments provided by Reviewer #3 were addressed as suggested.